

Project Synopsis

Project Title:

Online Ration Distribution System

Objective:

To develop a web-based application that digitizes the ration distribution system for government ration shops, allowing families to purchase essential commodities online. The system uses **Aadhar-based authentication**, displays **real-time stock availability**, and enables both **pickup with OTP/token verification** or **home delivery with additional charges**.

Layer	Technology
Frontend	React.js, Tailwind CSS
Backend	Python, Django, Django REST Framework
Database	PostgreSQL
Mobile App	React Native (optional)
Authentication	Aadhar/Phone number + OTP (via SMS API)
Payment	Razorpay

Modules & Features:

User (Family Member):

Login using Aadhar number (linked to a Family ID)

View available ration stock for their registered area

Add items to cart and place an order

Choose delivery or pickup option

Make payment through Razorpay

Receive **OTP + Token Number** after payment

Track order status

Pickup System:

User shows OTP + token number at ration shop

Admin verifies and delivers the items

Delivery System:

Government-defined delivery charges are applied

Items delivered to user's address

Admin marks item as delivered

Admin Panel:

Login securely

Add or update stock for each area

View and manage orders (pickup or delivery)

Verify tokens and OTPs at the time of item pickup

View reports and export data